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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,777	07/06/2006	Shaun P. Jackson	133087.13801	1694
52286	7590	09/23/2008	EXAMINER	
Pepper Hamilton LLP			DENTZ, BERNARD I	
400 Berwyn Park			ART UNIT	
899 Cassatt Road			PAPER NUMBER	
Berwyn, PA 19312-1183			1625	
MAIL DATE		DELIVERY MODE		
09/23/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/522,777

**Applicant(s)**

JACKSON ET AL.

**Examiner**

Bernard Dentz

**Art Unit**

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 0208.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21 and 26-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 21 and 26-29 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The structural formulae in claims 26 and 28 are missing a double bond at the 2,3 position of the bicyclic ring.

In claim 26 n is not defined.

The first inhibitor of claim 29 is not within the scope of claim 26 from which it ultimately depends. because R2 therein doesn't include H.

The same holds for the penultimate inhibitor in said claim because in claim 26 R3 does not include tetrazol-5-yl.

Claims 26, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Robertson et al, WO 01/53266. The corresponding US Patent 6,977,255 of identical disclosure is supplied and referenced in the rejection. It generically discloses that the instant 2-morpholin-4-yl-9-(1-phenylaminoethyl)-pyrido[1,2-a]pyrimidin-4-ones and the corresponding 2-morpholin-4-yl-8-(1-phenylaminoethyl)-quinol-4-ones are useful in the treatment of cardiovascular diseases. See col. 1-8. These are preferred compounds within the generic disclosure. See especially col. 4, line 35, e.g. Finally, very importantly see the synthesis of compounds TGX-183 and 186 in Ex. 2C.

Claims 21 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al, supra. The instant preferred compounds differ from the above

specifically disclosed compounds in having a methyl group replacing 1 of the H's attached to the C between the 9-position of the pyridopyrimidone moiety and the N of the arylamino group. Note that TGX-183 is the demethyl homolog of the first cpd. of claim 21.

The basic shape, polarity, medicinal properties etc. of the above art species would be expected to be retained by these homologs. Of course the 103 rejection is made stronger by the fact that these "methyl homologs" are within the generic disclosure of the reference.

Note that the patent teaches that the 9-(8-position for the quinolones) position substituent can be (CHR<sub>3</sub>)<sub>n</sub>-NR<sub>3</sub>-aryl where n is 0-2 and R<sub>3</sub> is H or substituted or unsubstituted C<sub>1</sub>-C<sub>6</sub> alkyl, or subst. or unsubst. aryl.

Note that TGX 183 and 186 are highly active in 2 activity tests. See Tables V and IV respectively.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21 and 26-29 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,977,255. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim 1 is generic to the instant claims and claims 2 and 3 claim homologous sub-groups.

Claims 26-28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2 and 6-17 of U.S. Patent No. 7,405,211. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 6-17 are generic to the instant claims and claim 2 claims a homologous sub-group.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on 571 272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ Bernard Dentz/

Primary Examiner, Art Unit 1625